BERKELEY LAB
Nuclear Science Division

Call for Proposals for the use of the LBL 88-Inch Cyclotron

For the period of October 14, 1997 through March 30, 1997

10 copies must be received by Monday, September 29, 1997

PAC Timetable:

Proposals due at LBL:	Monday, September 29, 1997
PAC meeting:	October 10-11, 1997
PAC-30 Scheduling Begins:	November 6, 1997
"Fall" Maintenance Shutdown:	September 16- November 5, 1997
"Winter" Holiday Shutdown	December 22, 1997 - January 6, 1998 (tent.)

PAC Composition:

J. Hardy, Chair	Texas A&M	V. Viola	Indiana University
W. Nazarewicz	Univ. of Tennessee	S. Yates	Univ. of Kentucky
M. Riley	Florida State University		

Please send 10 copies of your completed proposals to:

Dr. Peggy McMahan
MS 88-101
Lawrence Berkeley Laboratory
Berkeley, CA 94720

If you have any questions, you may direct them to Peggy at (510) 486-5980 or by E-mail to MCMAHAN@LBL.gov.

General Notes:

All proposals will be reviewed by Cyclotron safety and operations staff. Any significant safety or operational issues will be discussed with the Spokesperson and if warranted, will be discussed with the PAC Committee. Experimental setups must meet all safety requirements before beam is authorized by the Program Head for the Cyclotron.

If you have any PAC approved experiments from the last period, be sure to provide a brief status report on them for the PAC. Also it is very useful for Cyclotron management to have copies of preprints or reprints that come out of Cyclotron experiments, both to respond to questions from the PAC as well as from DOE. Please send to Peggy at the above address.

All participants must meet DOE, Laboratory, and Cyclotron requirements for training, etc.

A list of beams available at the Cyclotron is attached. Other beams can be developed. Requests for separated isotopes, unless provided by the user, require justification on the Proposal form and approval by the Cyclotron Head. Experimenters may be asked to assume the cost of separated isotopes.

Spokespersons with carryover time from PAC-29 will be notified of how much carryover time they have for which experiments so they can consider that in their PAC-30 plans. It is not necessary to resubmit a proposal that was carried over from PAC-29.

The Berkeley Gas-Filled Spectrometer (BGS) magnets will be installed in Cave 1 during October. Initial testing of the BGS capabilities is planned for January 1998, and the BGS should be available for experiments late in the PAC 30 scheduling period.. The Chalk River 8-π array is at the Cyclotron for approximately 1.5 years and will be installed in Cave 4c. Parts of it will be used in conjunction with the BGS as well. Experiments using the 8-π Spectrometer in Cave 4c are expected to be scheduled beginning in January. Information is attached about these two detector systems. For further information regarding the BGS contact Ken Gregorich (KEGregorich@lbl.gov) and regarding the 8-π Spectrometer, contact David Ward (Wardd@lbl.gov).

Claude Lyneis
Program Head, 88" Cyclotron

Attachments:
Cyclotron Beam List
PAC Request Form
BGS Description
8-π Description

The PAC-30 Call and forms are available online.

If you are at LBL and have a Macintosh, you can copy them using Appleshare (*Bridged Subnet Zone, Peggy McMahan's Macintosh, PAC 30Forms* folder).

Copies of this call and the PAC 30 Form in Macintosh MS Word format or PDF format can be downloaded from the World Wide Web beginning Monday August 25th. The 88-Inch Cyclotron Home Page is http://user88.lbl.gov/.

The 8-π Spectrometer

The 8π Spectrometer from Chalk River Laboratory is being installed in Cave 4c and if all goes well, will be available for experiments by mid-January. This instrument feature 1) a spherical shell of 72 BGO scintillator detectors and 2) and array of 20 high-purity Ge detectors (≈25% efficient) with BGO suppresion shields. Auxiliary equipment will be available such as 1) a CsI ball with photodiode readout (50 elements) and 2) a computer controlled recoil distance apparatus.

In future PAC periods, periods of standalone running of the 8π detector in Cave 4c will be interleaved with periods of running the HPGe - suppresion shield array at the focal plane of the Berkeley Gas-Filled Spectrometer (BGS) in Cave 1. This facility is intended to exploit the capabilities of the BGS in decay studies of exotic nuclei.

For further information on the 8π Spectrometer, contact David Ward:

E-mail: Wardd@lbl.gov
Phone: 510-486-6193
Fax: 510-486-7983